CLAIMS:

1. A microlens array comprising:

a transparent lens substrate, wherein the transparent lens substrate has a first end and a second end, which are on opposite sides of the lens substrate, and wherein the second end is inclined with respect to the first end; and

a plurality of microlenses formed on the lens substrate to be located either inside or outside the first end, wherein each microlens has an optical axis, wherein the optical axis of each microlens intersects with the first end and the second end of the lens substrate at a first intersection and a second intersection, wherein the distance between the first and second intersections defines a substrate thickness, and wherein the substrate thickness differs depending on each microlens.

2. The microlens array according to claim 1, wherein the microlenses are arranged in a line along a direction in which the substrate thickness varies.

3. The microlens array according to claim 1, wherein the microlenses are arranged in a two-dimensional matrix.

4. The microlens array according to claim 1, wherein the first end is arranged to be perpendicular to the optical axis of each microlens.

5. The microlens array according to claim 4, wherein the second end is inclined with respect to the first end in more than one direction.

6. An optical module, which includes a microlens array and an optical fiber, wherein the microlens array and the optical fiber are located apart from each other by a

desired lens to optical fiber distance,

wherein the microlens array includes:

a transparent lens substrate, wherein the transparent lens substrate has a first end and a second end, which are on opposite sides of the lens substrate, and wherein the second end is inclined with respect to the first end; and

a plurality of microlenses formed on the lens substrate to be located either inside or outside the first end, wherein each microlens has an optical axis, wherein the optical axis of each microlens intersects with the first end and the second end of the lens substrate at a first intersection and a second intersection, wherein the distance between the first and second intersections defines a substrate thickness, and wherein the substrate thickness varies depending on each microlens,

wherein one of the microlenses is selected to optimize the substrate thickness, and wherein the position of the optical fiber is determined with respect to the selected microlens.

7. The microlens array according to claim 6, wherein the microlenses are arranged in a line along a direction in which the substrate thickness varies.

8. The microlens array according to claim 6, wherein the microlenses are arranged in a two-dimensional matrix.

9. The microlens array according to claim 6, wherein the first end is arranged to be perpendicular to the optical axis of each microlens.

10. The microlens array according to claim 9, wherein the second end is inclined with respect to the first end in more than one direction.

11. An optical module, which includes a microlens array and an optical array, wherein the optical array has a plurality of optical fibers, and wherein the microlens array and the optical fiber array are located apart from each other by a desired lens to optical fiber distance,

wherein the microlens array includes:

a transparent lens substrate, wherein the transparent lens substrate has a first end and a second end, which are on opposite sides of the lens substrate, and wherein the second end is inclined with respect to the first end; and

a plurality of microlenses formed on the lens substrate to be located either inside or outside the first end, wherein each microlens has an optical axis, wherein the microlenses are arranged in lines in a two-dimensional matrix, wherein the optical axis of each microlens intersects the first end and the second end of the lens substrate at a first intersection and a second intersection, wherein the distance between the first and second intersections defines a substrate thickness, and wherein the substrate thickness varies depending on each microlens,

wherein one of the lines of the microlenses is selected to optimize the substrate thickness, and wherein the position of the optical fiber array is determined with respect to the selected line of microlenses.

12. A method for determining the position of a microlens array and an optical fiber such that the microlens array and the optical fiber are apart from each other by a desired distance, the method comprising:

preparing the microlens array, wherein the microlens array includes a plurality of microlenses, which are located either inside or outside a first end of a lens substrate, wherein each microlens has an optical axis, wherein the optical axis of each microlens intersects the first end and a second end of the lens substrate at a first intersection and a

second intersection, wherein the distance between the first and second intersections defines a substrate thickness, and wherein the substrate thickness varies depending on each microlens;

selecting one of the microlenses to optimize the substrate thickness; and

determining the position of the optical fiber with respect to the selected microlens.

13. The method according to claim 12, wherein selecting one of the microlenses includes selecting one of the microlenses that corresponds to a portion of the lens substrate where the substrate thickness is closest to and less than the optimal substrate thickness, and

wherein determining the position of the optical fiber includes shifting the optical fiber along the optical axis of the selected microlens until the distance between the selected microlens and the optical fiber reaches the desired distance.